

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: June 25, 2003, 14:38:41 ; Search time 26.8605 Seconds  
(Without alignments)  
843.812 Million cell updates/sec

Title: US-09-622-613B-19  
Perfect score: 599  
Sequence: 1 OMNATFOOKHIKTPICNT.....ICVKCENQYFVHAGIGRCP 110

Scoring table: BIOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 671580/seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

1: SP.TREMBL\_21:\*  
2: SP.Archea:\*  
3: SP.Bacteria:\*  
4: SP.Fungi:\*  
5: SP.Human:\*  
6: SP.Invertebrate:\*  
7: SP.Mammal:\*  
8: SP.MHC:\*  
9: SP.Organelle:\*  
10: SP.Phage:\*  
11: SP.Plant:\*  
12: SP.Rodent:\*  
13: SP.Virus:\*  
14: SP.Vertebrate:\*  
15: SP.Unclassified:\*  
16: SP.Virus:\*  
17: SP.Bacteria:\*  
18: SP.Archea:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	579.5	96.7	133	13	09PWR7
2	548.5	91.6	133	13	09PWR7
3	482.5	80.6	133	13	09PWR7
4	468.5	78.2	133	13	09PWR7
5	461.5	77.0	133	13	09PWR7
6	443.5	74.0	133	13	09PWR7
7	371	61.9	133	13	09PWR7
8	271.5	45.3	133	13	09PWR7
9	267.5	44.7	133	13	09PWR7
10	241	40.2	133	13	09PWR7
11	223.5	37.3	133	13	09PWR7
12	221.5	37.0	133	13	09PWR7
13	212.5	35.5	133	13	09PWR7
14	166	27.7	133	13	09PWR7
15	122	20.4	133	6	09BEC1
16	120.5	20.1	133	6	09BEC1

17	120	20.0	150	11	08VD94	08VD94 beryllus bo
18	118	19.7	150	11	08VD88	08VD88 rattus norv
19	117.5	19.6	144	6	09BH14	09BH14 antilocapra
20	115.5	19.3	116	6	09TWC0	09TWC0 sus. scrofa
21	115	18.9	150	11	08VD92	08VD92 rattus exul
22	113.5	18.9	152	11	08VD89	08VD89 rattus norv
23	112.5	18.3	119	6	09TV33	09TV33 bos taurus
24	109.5	18.3	124	6	09SNE6	09SNE6 bubalus bub
25	109	18.2	124	6	09BEC2	09BEC2 traquilus ja
26	108.5	18.1	149	11	08VD95	08VD95 beryllus bo
27	108	18.0	134	6	09BDB9	09BDB9 traquilus ja
28	107.5	17.9	119	6	09TV30	09TV30 saguinus oe
29	107.5	17.9	119	6	09TV28	09TV28 eulimur ful
30	107.5	17.9	152	11	08VD84	08VD84 rattus tlim
31	107.5	17.9	156	6	08S005	08S005 lagotrix l
32	105.5	17.6	124	6	09TSF2	09TSF2 bos taurus
33	105.5	17.6	136	6	08S006	08S006 ateles geof
34	104.5	17.4	142	6	09BEC3	09BEC3 traquilus ja
35	104.5	17.4	152	11	08VD90	08VD90 rattus fusc
36	104.5	17.4	156	6	08S008	08S008 salmuri sci
37	104.5	17.4	156	6	08S007	08S007 saguinus oe
38	102.5	17.1	119	6	09TS66	09TS66 cercopithec
39	102.5	17.1	149	11	08VD93	08VD93 rattus exul
40	101.5	16.9	119	6	09TV32	09TV32 gorilla gor
41	100.5	16.8	158	6	08SPV3	08SPV3 saguinus ja
42	100	16.7	158	6	08SPV2	08SPV2 callithrix
43	99.5	16.6	119	6	09TV31	09TV31 salmuri sci
44	98.5	16.4	147	11	08VD87	08VD87 rattus rat
45	98.5	16.4	156	6	08SPV4	08SPV4 pygachrix n

## ALIGNMENTS

RESULT 1	ID	Q9PWR7	PRELIMINARY:	PRT:	133 AA.
AC	Q9PWR7				
DT	01-MAY-2000	(Tremblrel, 13, Created)			
DT	01-MAY-2000	(Tremblrel, 13, Last sequence update)			
DT	01-DEC-2001	(Tremblrel, 19, Last annotation update)			
DE	Ribonuclease precursor.				
GN	RCR.				
OS	Rana catesbeiana (Bull frog).				
OC	Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:				
OC	Amphibia: Batrachia: Anura: Neobatrachia: Ranioidea: Ranidae: Rana.				
OX	NCBI_TaxID=8400;				
RP	SEQUENCE FROM N.A.				
RP	SEQUENCE FROM N.A.				
RC	TISSUE=LIVER:				
RX	MEDLINE=98165825; PubMed=9497370;				
RA	Huang H.C., Wang S.C., Liu Y.J., Lu S.C., Liao Y.D.;				
RT	"The Rana catesbeiana rcr gene encoding a cytototoxic ribonuclease.				
RT	Tissue distribution, cloning, purification, cytotoxicity, and active				
RT	residues for RNase activity."				
RL	J. Biol. Chem. 273:6395-6401(1998).				
DR	EMBL: AF039104; ADI0702.1;				
DR	HSSP: P11916; IBC4.				
DR	InterPro: IPR001427; RNaseA.				
DR	Pfam: PF00074; RNaseA; 1.				
DR	ProDom: PD000535; RNaseA; 1.				
DR	SMART: SM00092; RNase_Pc; 1.				
DR	PROSITE: PS00127; RNASE_PANCREATIC; UNKNOWN_1.				
KW	Signal.				
FT	SIGNAL	1	22		POTENTIAL.
FT	CHAIN	23	133		RIBONUCLEASE.
SO	SEQUENCE	133 AA;	14762 MW;		A7D62594F7D16FOC CRC64;
QY	Query Match	96.7%	Score 579.5;	DB 13;	Length 133;
	Best Local Similarity	96.4%	Pred. No. 2.8e-59;		
	Matches 107;	Conservative 2;	Mismatches 1;	Indels 1;	Gaps 1;
					1 OMNATFOOKHIKTPIL-CNTIIDNNIYVGGCKRVNTEFISSATYVKAICGVIMLV 59

Db 23 QNMATFOQKHIIPTNCNTIMDNNIYVGGCKRVNFTIISATVKAICTGVINMNV 82  
 Oy 60 LSTTRFOLNCTRTSTTPRCPYSSRTETNYICVKCENQYPVHFAGIGRCP 110  
 Db 83 LSTTRFOLNCTRTSTTPRCPYSSRTETNYICVKCENQYPVHFAGIGRCP 133

## RESULT 2

O98SMO

ID O98SMO PRELIMINARY: PRT: 133 AA.

AC O98SMO; 01-JUN-2001 (TREMBlrel. 17, Created)

DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)

DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)

DE RNase A-type ribonuclease rc208 precursor.

OS Rana catesbeiana (Bull frog).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

OC Amphibia; Batrachia; Anura; Neobatrachia; Ranidae; Rana.

OX: NCBI\_TaxID=8400;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE-21539506; PubMed-11683320;

RA Rosenberg H.F., Zhang J., Liao Y.-D., Dyer K.D.;

RT "Rapid diversification of RNase A superfamily ribonuclease from the

RL bullfrog, Rana catesbeiana."

RL J. Mol. Evol. 53:31-38(2001).

DR EMBL: AF351209; AAK30255.1;

DR HSSP: P11916; 1BC4.

DR InterPro: IPR001427; RNaseA.

DR Pfam: PF00074; rnaasea; 1.

DR ProDom: PD000535; RNaseA; 1.

DR SMART: SM00092; RNase\_Pc; 1.

DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.

KW Signal.

FT SIGNAL.

SQ SEQUENCE 133 AA: 14628 MW; 87FCF122C3499E02 CRC64;

Query Match

Best Local Similarity 91.6%; Score 548.5; DB 13; Length 133;

Matches 102; Conservative 2; Mismatches 6; Indels 1; Gaps 1;

Oy 1 QNMATFOQKHIIPTNCNTILDNNIYVGGCKRVNFTIISATVKAICTGVINLV 59

Db 23 QNMATFOQKHIIPTNCNTIMDNNIYVGGCKRVNFTIISATVKAICTGVINLV 82

Oy 60 LSTTRFOLNCTRTSTTPRCPYSSRTETNYICVKCENQYPVHFAGIGRCP 110

Db 83 LSTTRFOLNCTRTSTTPRCPYSSRTETNYICVKCENQYPVHFAGIGRCP 133

RESULT 3

O98SMO

ID O98SMO PRELIMINARY: PRT: 132 AA.

AC O98SMO; 01-JUN-2001 (TREMBlrel. 17, Created)

DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)

DT 01-JUN-2001 (TREMBlrel. 21, Last annotation update)

DE RNase A-type ribonuclease rc203 precursor (RC-RNase7 precursor).

OS Rana catesbeiana (Bull frog).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

OC Amphibia; Batrachia; Anura; Neobatrachia; Ranidae; Rana.

OX: NCBI\_TaxID=8400;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE-21539506; PubMed-11683320;

RA Rosenberg H.F., Zhang J., Liao Y.-D., Dyer K.D.;

RT "Rapid diversification of RNase A superfamily ribonuclease from the

RL bullfrog, Rana catesbeiana."

RL J. Mol. Evol. 53:31-38(2001).

RN [2]

RP SEQUENCE FROM N.A.

RX TISSUE=LIVER;

RA Liao Y.-D., Tang P.-C., Jeng J.-T.;

RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL: AF351207; AAK30253.1;

DR EMBL: AF359578; AAL87036.1;

DR HSSP: P11916; 1BC4.

DR InterPro: IPR001427; RNaseA.

DR Pfam: PF00074; rnaasea; 1.

DR ProDom: PD000535; RNaseA; 1.

DR SMART: SM00092; RNase\_Pc; 1.

DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.

KW Signal.

FT SIGNAL.

SQ SEQUENCE 132 AA: 14412 MW; 131A745187978687 CRC64;

## RESULT 4

O98SL9

ID O98SL9 PRELIMINARY: PRT: 133 AA.

AC O98SL9; 01-JUN-2001 (TREMBlrel. 17, Created)

DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)

DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)

DE RNase A-type ribonuclease rc212 precursor.

OS Rana catesbeiana (Bull frog).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

OC Amphibia; Batrachia; Anura; Neobatrachia; Ranidae; Rana.

OX: NCBI\_TaxID=8400;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE-21539506; PubMed-11683320;

RA Rosenberg H.F., Zhang J., Liao Y.-D., Dyer K.D.;

RT "Rapid diversification of RNase A superfamily ribonuclease from the

RL bullfrog, Rana catesbeiana."

RL J. Mol. Evol. 53:31-38(2001).

DR EMBL: AF351210; AAK30256.1;

DR HSSP: P11916; 1BC4.

DR InterPro: IPR001427; RNaseA.

DR Pfam: PF00074; rnaasea; 1.

DR ProDom: PD000535; RNaseA; 1.

DR SMART: SM00092; RNase\_Pc; 1.

DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.

KW Signal.

FT SIGNAL.

SQ SEQUENCE 133 AA: 14615 MW; C8785B236B2E54E CRC64;

Query Match

Best Local Similarity 78.2%; Score 468.5; DB 13; Length 133;

Matches 85; Conservative 12; Mismatches 13; Indels 1; Gaps 1;

Oy 1 QNMATFOQKHIIPTNCNTILDNNIYVGGCKRVNFTIISATVKAICTGVINLV 59

Db 23 QNMATFOQKHIIPTNCNTIMDNNIYVGGCKRVNFTIISATVKAICTGVINLV 82

Oy 60 LSTTRFOLNCTRTSTTPRCPYSSRTETNYICVKCENQYPVHFAGIGRCP 110

Db 83 LSTTRFOLNCTRTSTTPRCPYSSRTETNYICVKCENQYPVHFAGIGRCP 133

RESULT 5

O98SL8

ID O98SL8 PRELIMINARY: PRT: 133 AA.

AC O98SL8; 01-JUN-2001 (TREMBlrel. 17, Created)

DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)

DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)

DE RNase A-type ribonuclease rc212 precursor.

OS Rana catesbeiana (Bull frog).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

OC Amphibia; Batrachia; Anura; Neobatrachia; Ranidae; Rana.

OX: NCBI\_TaxID=8400;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE-21539506; PubMed-11683320;

RA Rosenberg H.F., Zhang J., Liao Y.-D., Dyer K.D.;

RT "Rapid diversification of RNase A superfamily ribonuclease from the

RL bullfrog, Rana catesbeiana."

RL J. Mol. Evol. 53:31-38(2001).

RN [2]

RP SEQUENCE FROM N.A.

RX TISSUE=LIVER;

ID 098SL8 PRELIMINARY: PRT: 133 AA.  
AC 098SL8:  
DT 01-JUN-2001 (Tremblrel. 17, Created)  
DT 01-JUN-2001 (Tremblrel. 17, Last sequence update)  
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)  
DE Rnase A-type ribonuclease rc218 precursor.  
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
OX NCBI\_TaxID=8400;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=21539506; PubMed=11683320;  
RA Rosenberg H.F., Zhang J., Liao Y.-D., Dyer K.D.;  
RT "Rapid diversification of Rnase A superfamily ribonuclease from the  
RT bullfrog, Rana catesbeiana.";  
RL J. Mol. Evol. 53:31-38(2001).  
DR EMBL; AF351211; AAC30257.1;  
DR HSSP; P11916; 1BC4  
DR InterPro: IPR001427; RnaseA.  
DR Pfam: PF00074; rnaaseA; 1.  
DR Prodom: PD000535; RnaseA; 1.  
DR SMART; SM00092; Rnase\_Pc; 1.  
DR PROSITE; PS00127; Rnase\_PANCREATIC; UNKNOWN\_1.  
KW Signal.  
FT SIGNAL  
SQ SEQUENCE 133 AA; 14590 MW; 8B40B9A94FA5B943 CRC64;  
POTENTIAL.

Query Match 77.0%; Score 461.5; DB 13; Length 133;  
Best Local Similarity 74.8%; Pred. No. 1.2e-45;  
Matches 83; Conservative 14; Mismatches 13; Indels 1; Gaps 1;

Oy 1 ONMATPOOKHIIKPII-CNTILNNIYIVGGCKRVNFTFISSATVKAICGVINLVN 59  
Db 23 ONMATPOOKHIIKPII-CNTILNNIYIVGGCKRVNFTFISSATVKAICGVINLVN 82  
Oy 60 LSTTRPOLNCTRTSTPRPCPYSSRTETNYICVCKENQYVHPAGIGRC 110  
Db 83 LSTTRPOLNCTRTSTPRPCPYSSRTETNYICVCKENQYVHPAGIGRC 133

RESULT 6  
ID 098SM1 PRELIMINARY: PRT: 132 AA.  
AC 098SM1:  
DT 01-JUN-2001 (Tremblrel. 17, Created)  
DT 01-JUN-2001 (Tremblrel. 17, Last sequence update)  
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)  
DE Rnase A-type ribonuclease rc204 precursor.  
OS Rana catesbeiana (bull frog).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
OX NCBI\_TaxID=8400;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=21539506; PubMed=11683320;  
RA Rosenberg H.F., Zhang J., Liao Y.-D., Dyer K.D.;  
RT "Rapid diversification of Rnase A superfamily ribonuclease from the  
RT bullfrog, Rana catesbeiana.";  
RL J. Mol. Evol. 53:31-38(2001).  
DR EMBL; AF351206; AAC30254.1;  
DR HSSP; P11916; 1BC4  
DR InterPro: IPR001427; RnaseA.  
DR Pfam: PF00074; rnaaseA; 1.  
DR Prodom: PD000535; RnaseA; 1.  
DR SMART; SM00092; Rnase\_Pc; 1.  
DR PROSITE; PS00127; Rnase\_PANCREATIC; UNKNOWN\_1.  
KW Signal.  
FT SIGNAL  
SQ SEQUENCE 132 AA; 14704 MW; 95D61760F729868E CRC64;  
POTENTIAL.

Query Match 74.0%; Score 443.5; DB 13; Length 132;  
Best Local Similarity 77.3%; Pred. No. 1.4e-43;

Matches 85; Conservative 7; Mismatches 17; Indels 1; Gaps 1;  
Oy 1 ONMATPOOKHIIKPII-CNTILNNIYIVGGCKRVNFTFISSATVKAICGVINLVN 59  
Db 23 ONMATPOOKHIIKPII-CNTILNNIYIVGGCKRVNFTFISSATVKAICGVINLVN 82  
Oy 60 LSTTRPOLNCTRTSTPRPCPYSSRTETNYICVCKENQYVHPAGIGRC 109  
Db 83 LSTTRPOLNCTRTSTPRPCPYSSRTETNYICVCKENQYVHPAGIGRC 132

RESULT 7  
ID 09DF78 PRELIMINARY: PRT: 132 AA.  
AC 09DF78:  
DT 01-MAR-2001 (Tremblrel. 16, Created)  
DT 01-OCT-2001 (Tremblrel. 18, Last sequence update)  
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)  
DE RC-Rnasel1 ribonuclease precursor.  
OS Rana catesbeiana (bull frog).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
OX NCBI\_TaxID=8400;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=20512555; PubMed=11058105;  
RA Liao Y.D., Huang H.C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.-C.;  
RT "Purification and cloning of cytoxic ribonucleases from Rana  
RT catesbeiana (bullfrog)."  
RL Nucleic Acids Res. 28:4097-4104(2000).  
RN [2]  
RP SEQUENCE FROM N.A.  
RX TISSUE=LIVER:  
RA Liao Y.-D., Huang H.-C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.-C.;  
RL Submitted (Aug-2001) to the EMBL/Genbank/DBJ databases.  
DR EMBL; AF288642; AAC30414.2;  
DR HSSP; P11916; 1BC4.  
DR InterPro: IPR001427; RnaseA.  
DR Pfam: PF00074; rnaaseA; 1.  
DR Prodom: PD000535; RnaseA; 1.  
DR SMART; SM00092; Rnase\_Pc; 1.  
DR PROSITE; PS00127; Rnase\_PANCREATIC; UNKNOWN\_1.  
KW Signal.  
FT SIGNAL  
FT CHAIN  
SQ SEQUENCE 132 AA; 14625 MW; DBD9A517452FB53 CRC64;

Query Match 61.9%; Score 371; DB 13; Length 132;  
Best Local Similarity 64.9%; Pred. No. 3.4e-35;  
Matches 72; Conservative 9; Mismatches 28; Indels 2; Gaps 2;

Oy 1 ONMATPOOKHIIKPII-CNTILNNIYIVGGCKRVNFTFISSATVKAICGVINLVN 58  
Db 22 ONMAFKKXHTTSSIDCNTIMDKAIYIVGGCKRVNFTFISSATVKAICGVINLVN 81  
Oy 59 VLSTTRPOLNCTRTSTPRPCPYSSRTETNYICVCKENQYVHPAGIGRC 109  
Db 82 ELSTTRPOLNCTRTSTPRPCPYSSRTETNYICVCKENQYVHPAGIGRC 132

RESULT 8  
ID 0918V8 PRELIMINARY: PRT: 127 AA.  
AC 0918V8:  
DT 01-OCT-2000 (Tremblrel. 15, Created)  
DT 01-OCT-2000 (Tremblrel. 15, Last sequence update)  
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)  
DE Onconase variant rap1 precursor.  
OS Rana pipiens (Northern leopard frog).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
OX NCBI\_TaxID=8404;

RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=LIVER;  
 RX MEDLINE=20330357; PubMed=10871370;  
 RA Chen S.-L., Le S.-Y., Newton D.L., Maizel J.V. Jr., Rybak S.M.;  
 RT "A gender-specific mRNA encoding a cytotoxic ribonuclease contains a  
 RL 3' UTR of unusual length and structure";  
 DR EMBL: AF165133; AAF76935.1; -;  
 DR HSSP: P22069; 10NC;  
 DR InterPro: IPR001427; RNaseA.  
 DR Pfam: PF00074; rnaasea; 1.  
 DR Prodom: PD000535; RNaseA; 1.  
 DR SMART: SM00092; RNase\_Pc; 1.  
 DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.  
 KW Signal.  
 FT SIGNAL.  
 SQ SEQUENCE 127 AA: 14491 MW: 8511DC5407AB69B CRC64:

Query Match 45.3%; Score 271.5; DB 13; Length 127;  
 Best Local Similarity 47.7%; Pred. No. 1e-23;  
 Matches 53; Conservative 16; Mismatches 33; Indels 9; Gaps 4;

OY 1 QNMATFOCKHIIKT-PIICNTILDNNTIYVGQCKRVNFTIISATYKAICTGYI-  
 DB 24 QDWLTFQCKHIIKTNRDVCNNIMSTLNF----HCKDKNTFYISREPEYKAIKGIASKN 79  
 OY 59 VLSSTRFQNLNCTRTSIRPCPYSSRTETNYICVKCENQYVPHFAGIGRC 109  
 DB 80 VLTISEFYLSDC---NVTISRCCKYKLRKSTNFCVTCENQAPVHFGVGHG 127

## RESULT 9

O8UVX5 PRELIMINARY: PRT: 127 AA.  
 AC O8UVX5:

DT 01-MAR-2002 (TREMBLrel. 20, Created)  
 DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
 DE Oncogene precursor.  
 GN RPR.

OS Rana pipiens (Northern leopard frog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
 OX NCBI\_TaxID=8404;

RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Liao Y.-D., Wang S.-C.;  
 RT "Rana pipiens onconase genomic DNA";  
 RL Submitted (DEC-2000) to the EMBL/Genbank/DBJ databases.  
 DR EMBL: AF332139; AAL54383.1; -;  
 DR InterPro: IPR001427; RNaseA.  
 DR Pfam: PF00074; rnaasea; 1.  
 DR Prodom: PD000535; RNaseA; 1.  
 DR SMART: SM00092; RNase\_Pc; 1.  
 DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.  
 KW Signal.  
 FT SIGNAL.  
 SQ SEQUENCE 127 AA: 14469 MW: 953F90D351CEEF3 CRC64:

Query Match 44.7%; Score 267.5; DB 13; Length 127;  
 Best Local Similarity 47.7%; Pred. No. 3e-23;  
 Matches 53; Conservative 16; Mismatches 33; Indels 9; Gaps 4;

OY 1 QNMATFOCKHIIKT-PIICNTILDNNTIYVGQCKRVNFTIISATYKAICTGYI-  
 DB 24 QDWLTFQCKHIIKTNRDVCNNIMSTLNF----HCKDKNTFYISREPEYKAIKGIASKN 79  
 OY 59 VLSSTRFQNLNCTRTSIRPCPYSSRTETNYICVKCENQYVPHFAGIGRC 109  
 DB 80 VLTISEFYLSDC---NVTISRCCKYKLRKSTNFCVTCENQAPVHFGVGHG 127

## RESULT 10

O9DFY6 PRELIMINARY: PRT: 129 AA.  
 AC O9DFY6:

DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-OCT-2001 (TREMBLrel. 18, Last sequence update)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
 DE RC-RNase4 ribonuclease precursor.  
 OS Rana catesbeiana (Bull frog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
 OX NCBI\_TaxID=8400;

RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=LIVER;  
 RX MEDLINE=20512555; PubMed=11058105;  
 RA Liao Y.D., Huang H.C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.C.;  
 RT "Purification and cloning of cytotoxic ribonucleases from Rana  
 RL Nucleic Acids Res. 28:4097-4104(2000);  
 RN [2]

RP SEQUENCE FROM N.A.  
 RC TISSUE=LIVER;  
 RA Liao Y.-D., Huang H.-C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.-C.;  
 RL Submitted (AUG-2001) to the EMBL/Genbank/DBJ databases.  
 DR EMBL: AF242555; AAC31441.2; -;  
 DR HSSP: P22069; 10NC;  
 DR InterPro: IPR001427; RNaseA.  
 DR Pfam: PF00074; rnaasea; 1.  
 DR Prodom: PD000535; RNaseA; 1.  
 DR SMART: SM00092; RNase\_Pc; 1.  
 DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.  
 KW Signal.  
 FT SIGNAL.  
 FT CHAIN 1 23 POTENTIAL.  
 SQ SEQUENCE 129 AA: 14724 MW: 826A6282B10ABDA CRC64:

Query Match 40.2%; Score 241; DB 13; Length 129;  
 Best Local Similarity 42.5%; Pred. No. 3.6e-20;  
 Matches 48; Conservative 24; Mismatches 31; Indels 10; Gaps 5;

OY 1 QNMATFOCKHIIKT-PIICNTILDNNTIYVGQCKRVNFTIISATYKAICTGYI-  
 DB 24 QDWLTFQCKHIIKTNRDVCNNIMSTLNF----HCKDKNTFYISREPEYKAIKGIASKN 79  
 OY 59 VLSSTRFQNLNCTRTSIRP-PCPYSSRTETNYICVKCENQYVPHFAGIGRC 110  
 DB 80 VLSNSEFYLAEC---NVAKPRKPKYKLRKSSNRICRCEHPLPVHFGVGHG 129

## RESULT 11

O9DFY8 PRELIMINARY: PRT: 128 AA.  
 AC O9DFY8:

DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
 DE RC-RNase2 ribonuclease precursor.  
 OS Rana catesbeiana (Bull frog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
 OX NCBI\_TaxID=8400;

RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=LIVER;  
 RX MEDLINE=20512555; PubMed=11058105;  
 RA Liao Y.D., Huang H.C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.C.;  
 RT "Purification and cloning of cytotoxic ribonucleases from Rana  
 RL Nucleic Acids Res. 28:4097-4104(2000).  
 RN [2]

RP SEQUENCE FROM N.A.  
 RC TISSUE=LIVER;

RA Liao Y.-D., Huang H.-C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.-C.;  
 RL Submitted (Aug-2001) to the EMBL/GenBank/DBJ databases.  
 DR EMBL: AF242553; AAC31439.1; -  
 DR HSSP: P22069; 10NC.  
 DR InterPro: IPR001427; RNaseA.  
 DR Pfam: PF00074; rnaaseA; 1.  
 DR ProDom: PD000535; RNaseA; 1.  
 DR SMART: SM00092; RNase\_Pc; 1.  
 DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.  
 KW Signal.  
 FT SIGNAL  
 FT CHAIN 1 23 POTENTIAL.  
 SQ SEQUENCE 128 AA: 14839 MM: 989719CE52053ECC CRC64;

Query Match 37.3%; Score 223.5; DB 13; Length 128;  
 Best Local Similarity 39.3%; Pred. No. 3.7e-18;  
 Matches 44; Conservative 20; Mismatches 39; Indels 9; Gaps 4;

OY 1 ONMATFOOKHIIKT-PIICNTILDNNIYVGGCKRVNFTISSATVKAICTGV-ILN 58  
 DB 24 QNMETFOKKHLTDKRVKCDVEMKALF---DCKKTFTFYALPGRKALCKNIRND 79  
 OY 59 VLSSTRQNLNCTRTSITPRCPYSSRTETNYICVCKENQYVPHAGIGRCP 110  
 DB 80 VLSRVEFLPQCNRIKL---FCHYKLRKSSNTICITCKELPIHFAVGEGCP 128

## RESULT 12

O9DFY7 PRELIMINARY; PRT; 128 AA.  
 AC O9DFY7;  
 DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-OCT-2001 (TREMBLrel. 18, Last sequence update)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
 DE RC-RNase3 ribonuclease precursor.  
 OS Rana catesbeiana (Bull frog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
 OX NCBI\_TaxID=8400;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE-LIVER.  
 RX MEDLINE=20512555; PubMed=11058105;  
 RA Liao Y.-D., Huang H.-C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.-C.;  
 RT "Purification and cloning of cytotoxic ribonucleases from Rana  
 catesbeiana (bullfrog)."  
 RL Nucleic Acids Res. 28:4097-4104(2000).  
 DR EMBL: AF242554; AAC31440.2; -  
 DR HSSP: P22069; 10NC.  
 DR InterPro: IPR001427; RNaseA.  
 DR Pfam: PF00074; rnaaseA; 1.  
 DR ProDom: PD000535; RNaseA; 1.  
 DR SMART: SM00092; RNase\_Pc; 1.  
 DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.  
 KW Signal.  
 FT SIGNAL  
 FT CHAIN 1 23 POTENTIAL.  
 SQ SEQUENCE 128 AA: 14517 MM: 2814986082E0587D CRC64;

Query Match 37.0%; Score 221.5; DB 13; Length 128;  
 Best Local Similarity 40.2%; Pred. No. 6.3e-18;  
 Matches 45; Conservative 18; Mismatches 40; Indels 9; Gaps 4;

OY 1 ONMATFOOKHIIKT-PIICNTILDNNIYVGGCKRVNFTISSATVKAICTGV-ILN 58  
 DB 24 QNMETFOKKHLTDKRVKCDVEMKALF---DCKKTFTFYALPGRKALCKNIRND 79  
 OY 59 VLSSTRQNLNCTRTSITPRCPYSSRTETNYICVCKENQYVPHAGIGRCP 110  
 DB 80 VLSRVEFLPQCNRIKL---FCHYKLRKSSNTICITCKELPIHFAVGEGCP 128

## RESULT 13

O9DFY5 PRELIMINARY; PRT; 128 AA.  
 AC O9DFY5;  
 DT 01-MAR-2001 (TREMBLrel. 16, Created)  
 DT 01-OCT-2001 (TREMBLrel. 18, Last sequence update)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
 DE RC-RNase6 ribonuclease precursor.  
 OS Rana catesbeiana (Bull frog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.  
 OX NCBI\_TaxID=8400;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE-LIVER.  
 RX MEDLINE=20512555; PubMed=11058105;  
 RA Liao Y.-D., Huang H.-C., Leu Y.-J., Wei C.-W., Tang P.-C., Wang S.-C.;  
 RT "Purification and cloning of cytotoxic ribonucleases from Rana  
 catesbeiana (bullfrog)."  
 RL Nucleic Acids Res. 28:4097-4104(2000).  
 DR EMBL: AF242556; AAC31442.2; -  
 DR HSSP: P22069; 10NC.  
 DR InterPro: IPR001427; RNaseA.  
 DR Pfam: PF00074; rnaaseA; 1.  
 DR ProDom: PD000535; RNaseA; 1.  
 DR SMART: SM00092; RNase\_Pc; 1.  
 DR PROSITE: PS00127; RNASE\_PANCREATIC; UNKNOWN\_1.  
 KW Signal.  
 FT SIGNAL  
 FT CHAIN 1 23 POTENTIAL.  
 SQ SEQUENCE 128 AA: 14804 MM: AEFBFD67D2667C2 CRC64;

Query Match 35.5%; Score 212.5; DB 13; Length 128;  
 Best Local Similarity 38.4%; Pred. No. 7e-17;  
 Matches 43; Conservative 19; Mismatches 41; Indels 9; Gaps 4;

OY 1 ONMATFOOKHIIKT-PIICNTILDNNIYVGGCKRVNFTISSATVKAICTGV-ILN 58  
 DB 24 QNMETFOKKHLTDKRVKCDVEMKALF---DCKKTFTFYALPGRKALCKNIRND 79  
 OY 59 VLSSTRQNLNCTRTSITPRCPYSSRTETNYICVCKENQYVPHAGIGRCP 110  
 DB 80 VLSRVEFLPQCNRIKL---FCHYKLRKSSNTICITCKELPIHFAVGEGCP 128

## RESULT 14

O9W738 PRELIMINARY; PRT; 169 AA.  
 AC O9W738;  
 DT 01-NOV-1999 (TREMBLrel. 12, Created)  
 DT 01-NOV-1999 (TREMBLrel. 12, Last sequence update)  
 DT 01-JUN-2001 (TREMBLrel. 17, Last annotation update)  
 DE FRU2 protein.  
 GN FRU2.  
 OS Xenopus laevis (African clawed frog)  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;  
 OC Xenopodinae; Xenopus.  
 OX NCBI\_TaxID=8355;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=9606963; PubMed=7585965;  
 RA Kinoshita N., Minshall J., Kirschner M.W.;  
 RT "The identification of two novel ligands of the FGF receptor by a  
 yeast screening method and their activity in Xenopus development."  
 RL Cell 83:621-630(1995).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RA Kinoshita N., Kirschner M.W.;

